

CLASSIFICATION **SECRET**

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THIS IS UNEVALUATED INFORMATION

1. In official documents in the USSR, such as in reports concerning fuel consumption and in statements requesting fuel, heat capacity is not expressed in natural units but instead by predetermined coefficients. This is done because of the different calorific values for each of the different fuels. The government has established the calorific value of a standard fuel as 7000 kilogram calories per kilogram of fuel. Thus every fuel has its own conversion coefficient in terms of this standard fuel.

N' of a natural fuel equals KN

N equals standard fuel

K equals coefficient

Example:

- (a) Anthracite slab of the Donetsk Basin, AP, has N' equal to 7240 kilogram calories/kg. Conversion coefficient K equals 1.034. N' equals 1.034 times N, which equals 1.034 times 7000.
- (b) Run-of-mine coal with slack from the Podmoskovni Basin, RM, has N' equal to 2900 kg calories/kg. Conversion coefficient K equal to 0.415 for SM fuel. Thus N' equals 0.415 times 7000 which is 2900 kg calories/kg.

2.

3. Following is a list of the solid fuels

Podmoskovniy Basin

(a) K - coarse coal

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DISTRIBUTION																	
State	X	Army	X	Naval	X	AF	X	Marine	X	Coast Guard	X	Public	X	Private	X	Foreign	X
Army	X	AF	X	Marine	X	Coast Guard	X	Public	X	Private	X	Foreign	X	State	X	Army	X

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Volatile matter 45%
 Ash 15%
 Sulphur 2.5%
 Moisture 32%
 N (Minimum heat capacity) 3235 kg calories/kg.

(b) O - nut coal
 Volatile matter 45%
 Ash 18%
 Sulphur 2.5%
 Moisture 32%
 N (Minimum heat capacity) 3100 kg calories/kg

(c) MS - fine, pea coal
 Volatile matter 45%
 Ash 20%
 Sulphur 2.5%
 Moisture 32%
 N (Minimum heat capacity) 2800 kg calories/kg

(d) RM - run-of-mine coal with fines
 Volatile matter 45%
 Ash 20%
 Sulphur 2.5%
 Moisture 32%
 N (Minimum heat capacity) 2900 kg calories/kg

Borovicheskiy Deposits, Leningrad Oblast', (no types)

Volatile matter 49%
 Ash 20%
 Sulphur 5%
 Moisture 30%
 N (Minimum heat capacity) 3200 kg Calories/kg

Donets Basin

(a) AP - Anthracite slab coal
 Volatile matter 4%
 Ash 4.3%
 Sulphur 1.4%
 N (Minimum heat capacity) 7240 kg calories/kg

(b) AK - Anthracite coarse nut coal
 Volatile matter 4%
 Ash 6.5%
 Sulphur 1.4%
 Water 5.5%
 N (Minimum heat capacity) 7100 kg calories/kg

(c) AM - Anthracite fine nut coal
 Volatile matter 4%
 Ash 12%
 Sulphur 1.5%
 Moisture 5.5%
 N (Minimum heat capacity) 6600 kg calories/kg

(d) AS - Anthracite pea coal
 Volatile matter 4%
 Ash 13%
 Sulphur 1.4%
 Moisture 7%
 N (Minimum heat capacity) 6000 kg calories/kg

(e) ARSH - run-of-mine coal with culm
 Volatile matter 4%
 Ash 11%
 Sulphur 1.2%
 Moisture 7%
 N (Minimum heat capacity) 6600 kg calories/kg

(f) NSH - Anthracite culm
 Volatile matter 4%
 Ash 16%
 Sulphur 1.5%
 Moisture 7.5%
 N (Minimum heat capacity) 6000 kg calories/kg

(g) D - long flame coal
 Volatile matter 44%

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Ash 11%
 Sulphur 4%
 Moisture 13%
 N (Minimum heat capacity) 7700 kg calories/kg

(h) G - gas coal
 Volatile matter 39%
 Ash 11%
 Sulphur 3%
 Moisture 5%
 N (Minimum heat capacity) 8000 kg calories/kg

(i) PZH - Fat steam coal
 Volatile matter 30%
 Ash 11%
 Sulphur 2.6%
 Moisture 3%
 N (Minimum heat capacity) 8400 kg calories/kg

(j) K - coke
 Volatile matter 22%
 Ash 11%
 Sulphur 2%
 Moisture 3.5%
 N (Minimum heat capacity) 7100 kg calories/kg

(k) PS - Parovichnyy- coking coal
 Volatile matter 17%
 Ash 10%
 Sulphur 2%
 Moisture 3.5%
 N (Minimum heat capacity) 7200 kg calories/kg

(l) T - lean coal
 Volatile matter 1.3%
 Ash 9%
 Sulphur 1.5%
 Moisture 3.5%
 N (Minimum heat capacity) 7400 kg calories/kg

Pechorskiy Basin (no types)

(a) Necha coal
 Volatile matter 42%
 Ash 34%
 Sulphur 0.5%
 Moisture 21%
 N (Minimum heat capacity) 3200 kg calories/kg

(b) Tal'bey coal
 Volatile matter 42%
 Ash 40%
 Sulphur 1.5%
 Moisture 24%
 N (Minimum heat capacity) 2700 kg calories/kg

(c) Zaostryenny coal
 Volatile matter 42%
 Ash 31%
 Sulphur 1%
 Moisture 21%
 N (Minimum heat capacity) 3500 kg calories/kg

(d) Varkuta coal
 Volatile matter 30%
 Ash 12%
 Sulphur 1%
 Moisture 6%
 N (Minimum heat capacity) 6700 kg calories/kg

Transcaucasus deposits

(a) Tkvil'skiy - GL head coal
 Volatile matter 41%
 Ash 20%
 Sulphur 1.5%
 Moisture 11%
 N (Minimum heat capacity) 5300 kg calories/kg

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- (b) Tkvarchel'skiy - GPZH gas, parovichniy (Parovichniy is used to identify a second grade type of coking coal and is not translatable) fat coal
- | | |
|-----------------|-----|
| Volatile matter | 37% |
| Ash | 33% |
| Sulphur | 1% |
| Moisture | 6% |
- N (Minimum heat capacity) 4600 kg Calories/kg

Ural Coal fields

- (a) Kizelovskiy deposit - GPZH gas, parovichniy fat coal
- | | |
|-----------------|------|
| Volatile matter | 41% |
| Ash | 23% |
| Sulphur | 8% |
| Moisture | 5.5% |
- N (Minimum heat capacity) 5700 kg calories/kg
- (b) Chelyabinskii deposits - B lignite coal
- | | |
|-----------------|------|
| Volatile matter | 41% |
| Ash | 19% |
| Sulphur | 1.5% |
| Moisture | 19% |
- N (Minimum heat capacity) 4400 kg calories/kg
- (c) Bogoslovskiy deposits - BR brown (lignite) run-of-mine coal
- | | |
|-----------------|------|
| Volatile matter | 43% |
| Ash | 19% |
| Sulphur | 0.5% |
| Moisture | 29% |
- N (Minimum heat capacity) 3300 kg calories/kg
- (d) Egorshinskii deposits - AR anthracite, run-of-mine coal
- | | |
|-----------------|------|
| Volatile matter | 8% |
| Ash | 19% |
| Sulphur | 0.5% |
| Moisture | 6% |
- N (Minimum heat capacity) 6000 kg calories/kg
- (e) Poltavo-Bredinskii deposits - AR anthracite, run-of-mine coal.
- | | |
|-----------------|-----|
| Volatile matter | 3% |
| Ash | 23% |
| Sulphur | 1% |
| Moisture | 4% |
- N (Minimum heat capacity) 5700 kg calories/kg

Kuznetskiy Basin

- (a) Anshero-Sudshenskiy coal piles - PS parovichniy coking coal.
- | | |
|-----------------|------|
| Volatile matter | 16% |
| Ash | 9% |
| Sulphur | 0.5% |
| Moisture | 4% |
- N (Minimum heat capacity) 7300 kg calories/kg
- (b) Prokof'evskiy coal piles - no types.
- | | |
|-----------------|------|
| Volatile matter | 18% |
| Ash | 7% |
| Sulphur | 0.5% |
| Moisture | 6% |
- N (Minimum heat capacity) 7100 kg calories/kg
- (c) Kemerovskiy coal piles - no types
- | | |
|-----------------|------|
| Volatile matter | 29% |
| Ash | 14% |
| Sulphur | 0.5% |
| Moisture | 8% |
- N (Minimum heat capacity) 6200 kg calories/kg
- (d) Leninskii coal piles - K coke
- | | |
|-----------------|------|
| Volatile matter | 41% |
| Ash | 9% |
| Sulphur | 0.5% |
| Moisture | 6% |
- N (Minimum heat capacity) 6700 kg calories/kg
- (e) E - power coal
- | | |
|-----------------|------|
| Volatile matter | 4% |
| Ash | 9% |
| Sulphur | 0.3% |

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Moisture 9%
N (Minimum heat capacity) 6000 kg calories/kg

East Siberian coal fields

Cheremkhovskiy deposits - D long flame coal.

Volatile matter 45%
Ash 16%
Sulphur 1.4%
Moisture 10%
N (Minimum heat capacity) 5500 kg calories/kg

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